

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 3-11 and 17-19 are now pending, wherein claim 3 is amended, claims 12-16 are canceled, claims 17-19 are new, and claims 6-11 are withdrawn from consideration.

Claim 3 is objected to for minor informalities. Claim 3 has been amended to correct the typographical error in this claim. It is respectfully submitted that this amendment is not a narrowing amendment.

Claim 3 is rejected under 35 U.S.C. § 103(a) as being obvious in view of the combination of Park (US 5,526,336), Takeda (US 5,648,950) and Takahashi (5,963,531). This ground of rejection is respectfully traversed.

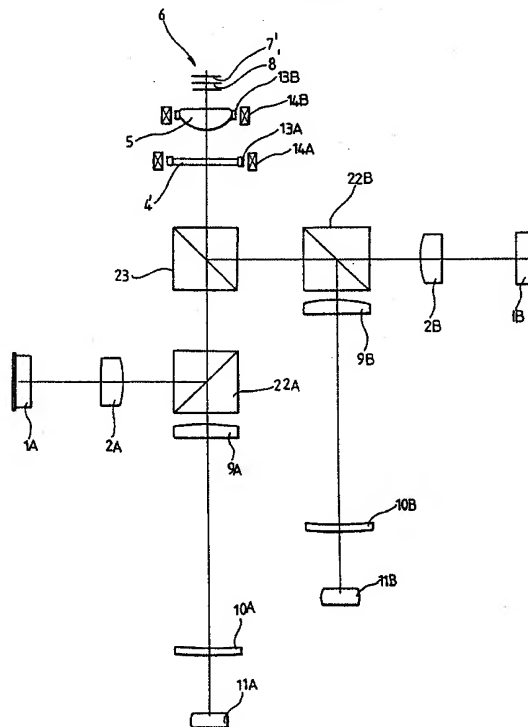
The combination of Park, Takeda and Takahashi does not render claim 3 obvious because the combination does not disclose or suggest the object lens of claim 3. Furthermore, one of ordinary skill in the art would not have been motivated to combine Park, Takeda and Takahashi to arrive at the optical pickup device of Applicant's claim 3.

Regarding the object lens, Applicant's claim 3 recites that the object lens condenses the laser beam onto the recording surfaces and comprises a multifocal

lens, and has "a curvature or refractive index that varies by steps in the radial direction." The rejection of claim 3 relies upon Figure 8 of Park, and cites element 5 of Park as corresponding to the object lens and elements 4 and 5 of Park as corresponding to an object lens comprises a multifocal lens.

As illustrated in Figure 8 of Park, reproduced below, the optical pickup includes, among other elements, a Fresnel lens 4' and an object lens 5. Focusing of a laser beam on recording layers 7' and 8' is achieved by focus driving coils 13A, for Fresnel lens 4', and by focus driving coil 13B, for objective lens 5.

FIG. 8



As clearly illustrated in Figure 8 above, Fresnel lens 4' and object lens 5 are illustrated as *separate elements*, and the disclosure of Park describes these as *separate elements*. Accordingly, one of ordinary skill in the art would not have combined these *two separate elements* into a single element as the Office Action has in order to reject the object lens comprising a multifocal lens of Applicant's claim 3. Furthermore, because Park provides focus driving coils 13A and 13B to adjust the focus of the laser beam, Park does not disclose or suggest an object lens that is a multifocal lens that has "a curvature or refractive index that varies by steps in the radial direction."

Takeda and Takahashi each do not disclose or suggest the object lens of Applicant's claim 3.

The Office Action recognizes that Park does not disclose or suggest the collimator lens and diffraction grating of Applicant's claim 3, and instead relies upon Takeda and Takahashi as disclosing these elements. It is respectfully submitted that one of ordinary skill in the art would not have modified the system of Park to include a collimator lens and diffraction grating arranged in the manner recited in Applicant's claim 3.

It is well established that a "prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the

claimed invention.”¹ It is respectfully submitted that when Takeda and Takahashi are considered in their entirety, each of these patent documents teaches away from the optical pickup device of Applicant’s claim 3, which includes, among other elements, a collimator lens and a diffraction grating being spatially separated from a half mirror.

Takeda discloses that one conventional magneto-optical pickup includes a collimator lens 4A, half-prism 5A, objective lens 6A and composite hologram lens 7A.² Takeda discloses that this conventional magneto-optical system has problems such as it is time consuming to determine the layout and registry of these parts.³ To overcome this problem Takeda discloses a system that *reduces the number of parts required in an optical pickup*. In the system of Takeda a hologram 12 and/or polarization separation device 17 can be mounted on a beam splitter 13, and the system *does not include a collimator lens*.

Because Takeda discloses that prior systems that included a half-prism separate from a hologram lens and a collimator lens presented problems with layout and registry of parts, and then discloses a system that includes hologram 12 and polarization separation device 17 mounted on beam splitter 13 and does

¹ M.P.E.P. § 2141.02, citing *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

² Figure 22.

³ Column 2, lines 48-56.

not include a collimator lens, it is respectfully submitted that one of ordinary skill in the art would not have increased the difficulty of layout and registry of parts by including a collimator lens and a diffraction grating that is spatially separated from a half mirror as is the optical pickup device of Applicant's claim 3. In other words, Takeda clearly discloses that one object achieved by the invention of Takeda is to reduce the difficulty of layout and registry of parts and a solution that satisfies this object *does not include a collimator lens or a diffraction grating that is spatially separated from a half mirror.*

Takahashi discloses an optical head apparatus that includes a collimator lens 8, and first and second gratings 5a and 5b. In contrast to the collimator lens of Applicant's claim 3, which converts "the laser beam reflected or transmitted by the half mirror into parallel light", the collimator lens 8 of Takahashi is arranged between semiconductor laser 7 and beam splitter 4 in order to collimate the laser on the way to beam splitter 4. As such, the collimator lens 4 of Takahashi does not convert "the laser beam reflected or transmitted by the half mirror into parallel light" as does the collimator lens of Applicant's claim 3. Accordingly, Park, Takeda and Takahashi each do not disclose or suggest the collimator lens recited in Applicant's claim 3.

Moreover, it is respectfully submitted that the rejection of Applicant's claim 3 demonstrates that the rejection has not considered the claimed invention

as a whole. It is well established that “[i]n determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious.”⁴

The rejection of Applicant’s claim 3 recognizes that Park does not disclose the half mirror, diffraction grating and collimator lens recited in this claim, and relies upon selected disclosures of Takeda and Takahashi for these claim elements. The optical systems of the Applicant’s claim 3, Park, Takeda and Takahashi are complex optical systems in which parts are carefully selected and arranged in order to achieve particular purposes. The rejection of Applicant’s claim 3 does not indicate that any consideration has been given as to how the system of Park would operate once the three missing claim elements are added to the system, or that the system of Park would even operate as intended. Accordingly, it appears that the rejection only focuses on the differences between claim 3 and Park, and it is respectfully submitted that when claim 3 is *considered as a whole* one of ordinary skill in the art would not have found it obvious to add the *three missing elements* to Park arranged in the same manner as recited in Applicant’s claim 3.

⁴ M.P.E.P. § 2141.02 citing *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983).

Because the combination of Park, Takeda and Takahashi does not disclose or suggest all of the elements of claim 3, and one of ordinary skill in the art would not have been motivated to combine Park, Takeda and Takahashi in a manner to result in the optical pickup of claim 3, this combination does not render claim 3 obvious.

For at least those reasons set forth above, it is respectfully requested that the rejection of claim 3 as being obvious in view of the combination of Park, Takeda and Takahashi be withdrawn.

Claim 4 is rejected under 35 U.S.C. § 103(a) as being obvious in view of the combination of Park, Takeda, Takahashi and Hayata (JP 10302403 A). Claim 5 is rejected under 35 U.S.C. § 103(a) as being obvious in view of the combination of Park, Takeda, Takahashi and Nakamura (US 2003/0048737). These grounds of rejection are respectfully traversed.

Claims 4 and 5 depend from claim 3, and Hayata and Nakamura each do not remedy the above-identified deficiencies of Park, Takeda and Takahashi with respect to claim 3. Accordingly, claims 4 and 5 are patentably distinguishable at least by virtue of their dependency from claim 3.

New claim 17 recites similar elements to those discussed above with regard to claim 3, and is patentably distinguishable over the current grounds of rejection for similar reasons. New claims 18 and 19 are patentably distinguishable over the current grounds of rejection at least by virtue of their dependency from new claim 17.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #010482.52834US).

Respectfully submitted,

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Stephen W. Palan
Registration No. 43,420

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
SWP:crr
4718319